

Contraceptive Continuation and Pregnancy Intendedness: Evidence from DHS Calendar Data

Topic description

This paper seeks to clarify and expand evidence on the relationship between the discontinuation of contraceptive use, pregnancy intentions and unmet need for contraception.

Secondary analysis of data from six Demographic and Health Surveys (DHS) will be conducted to evaluate how women describe the intendedness of pregnancies that follow from contraceptive discontinuation. The contribution of contraceptive discontinuation to unintended pregnancy and unmet need for contraception will also be assessed.

Theoretical Focus

Contraceptive discontinuation is a common event (Blanc et al. 2000; Ali and Cleland 2004). The main reasons for discontinuing modern methods tend to be side effects and health concerns while the main reasons for discontinuing traditional methods tend to be failure and desire for a more effective method. At face value, these reported reasons for discontinuation suggest that the majority of women who discontinue do so for reasons other than desire to get pregnant or reduced exposure to pregnancy so are presumably exposed to the risk of an unintended pregnancy if they do not switch to another method. However, no studies have examined whether women report pregnancies following discontinuation as unintended or not. One study in the US showed that only 68% of women who reported their pregnancy as due to contraceptive failure actually reported it as unintended and only 59% of those women reported that they felt very unhappy or unhappy about the pregnancy (Trussell et al. 1999). Studies in developing countries have shown that women who are using contraception to space births are more likely to discontinue use for reasons unrelated to desire for pregnancy (e.g. side effects, health concerns) than are women who are using contraception to limit births. Further, women are more likely to discontinue use for a range of reasons following a change in marital status (Curtis and Blanc 1997). These findings suggest that the decision to discontinue contraception is a complex one that is influenced by many factors of which the strength of motivation to avoid pregnancy is likely to be an important one. This paper will contribute to our understanding of the role of strength of motivation to avoid pregnancy in contraceptive discontinuation. High levels of reporting of intended pregnancies following contraceptive discontinuation for reasons other than intent to become pregnant would support the hypothesis that many women discontinue contraception because their motivation to avoid pregnancy is relatively low.

The second aim of this paper is to better understand the public health consequences of contraceptive discontinuation in terms of unintended pregnancy and unmet need for contraception. There is some evidence that contraceptive discontinuation is frequently associated with unintended pregnancy (Blanc et al. 2002) and in some cases unmet need (Jain 1999; Casterline et al 2003) but the evidence is still somewhat limited. This paper will document the contribution of contraceptive discontinuation and failure to unintended pregnancy and unmet need and place the findings in the context of the role of motivation to avoid pregnancy.

Data and Research Methods

Data from the calendar, birth and maternity histories and basic demographic sections of six recent Demographic and Health Surveys (DHS) will be analyzed. DHS surveys are nationally

representative, population-based household surveys with large sample sizes; for this study each survey interviewed between 4,800 and 23,000 women. The standard DHS survey consists of a household questionnaire and a women's questionnaire, which include a contraceptive history calendar for the five years preceding the survey. For all DHS surveys a nationally representative sample of women age 15–49 are interviewed; consent is obtained from all participants. Data from Bangladesh, Dominican Republic, Kazakhstan, Kenya, Philippines, and Zimbabwe DHS surveys are used in this analysis.

Using STATA, all live births occurring in the five years prior to the survey are extracted from the DHS calendar and the most recent contraceptive behavior in the pregnancy interval before the birth is categorized as follows: contraceptive failure, discontinuation of contraceptive use to get pregnant, discontinuation for other reasons, or no use of contraception in the interval prior to the birth. Pregnancy intention is defined for each live birth as whether the child was wanted at the time of the pregnancy (defined as within the next two years), wanted later (more than two years in the future), or not wanted at any time. This information is extracted from the maternity history and matched with the calendar data on discontinuation for each live birth. For the analysis of unmet need, the unmet need status of women who are not using contraception at the time of the survey will be classified according to their contraceptive behavior in the open interval, categorized as discontinuation of use to get pregnant, discontinuation for reduced need (e.g. marital dissolution, menopause), discontinuation for other reasons (e.g. side effects, health concerns) or no use of contraception.

Two analyses will be conducted; the first seeks to determine how the reported intendedness of each live birth varies by preceding contraceptive behavior and reason for discontinuation. The second analysis examines the consequences of contraceptive discontinuation by calculating how much discontinuation contributes to unintended pregnancy and to unmet need for contraception.

Cross-tabulations and logistic regression will be employed to answer research questions. The main outcome variables are the reported intendedness of the index birth and current unmet need status. In particular, we will examine the percentage of live births that are reported as wanted, mistimed, and unwanted by preceding contraceptive behavior, the percentage of all unintended births that are preceded by different types of contraceptive behavior and the distribution of women with unmet need by preceding contraceptive behavior. A multivariate analysis of the determinants of reporting a pregnancy as unintended will be conducted to determine the role of demographic, contraceptive, and soci-economic variables on reported pregnancy intentions.

Expected Findings

A significant proportion of unintended births are expected to be preceded by contraceptive discontinuation for reasons other than desire for pregnancy. However, we expect a significant proportion of births that were preceded by contraceptive discontinuation for reasons other than desire to get pregnant and failure to be reported as intended. We expect that those who discontinue because of contraceptive failure will be most likely to report subsequent pregnancies as unintended, followed by those who discontinue for other reasons, non-users, and finally those who discontinue in order to get pregnant. Finally, we expect a substantial proportion of current unmet need for contraception to have been preceded by contraceptive use.

References

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